Seasonal Variation of Cambial Activity in Branches of

Pterocarpus macrocarpus Kurz, *Shorea roxburghii* G. Don and

Dipterocarpus intricatus Dyer in Dry Dipterocarp Forest.

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ABSTRACT

The seasonal variation of cambial activity in branches of *Pterocarpus macrocarpus* Kurz, *Shoea roxburghii* G. Don and *Dipterocarpus intricatus* Dyer, wich are the deciduous thee species, was studied and related to some environmental factors and phenology. The methods and carried out by randomly choosing of ten individual trees of each species in dry dipterocarp forest of Sakaerat Environment Research Station, Amphur Pakthonchai, Nakhonratchasima province. From January to December 1980, monthly interval collections of three branches from individual tree of each species were carried out within the first week of every month. Each branch was transversely sectioned at the fourth internodes by sliding microtome and then was processed to obtain the permanent slides. Meteorological data were obtained from Sakaerat Environment Research Station. Soil-surface samples were also taken for determination of moisture content. The phrenology of each tree species was also observed.

With the photomicroscope, cambial activity was determined by numbering the layers of fascicular cambial zone. It was found that the significantly shown. The degrees of variation are depended on the species. Cambial activity is increased from March to May in *P. macrocarpus,* from April to August in *S. roxburghii* and from April to November in *D. intricatus.* After reaching the peak, the cambial activity of each species is gradually declined. No obvious relationship is found between the cambial activity of each tree species and the environmental factors, such as amount of rainfall, relative humidity of the atmosphere, air temperature and soil moisture. The cambial activity of the tree species appears to relate to their phonologic events. The activity is initiated by the new leaf formation and gradually increased with the degree of leaf development. After leaf maturity, the cambial activity of each species is gradually declined.